



# **RF Cable Assemblies Technical Data Sheet**

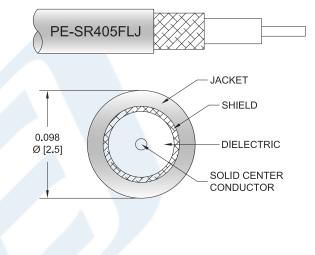
# PE3W05863/HS-48

## Configuration

- Connector 1: Snap-OnMMBX Plug
- Connector 2: SMA Male
- Cable Type: PE-SR405FLJ

## Features

- Max Frequency 12.4 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket



## Applications

General Purpose

Laboratory Use

### Description

Pasternack's PE3W05863/HS-48 MMBX plug snap-on to SMA male 48 inch cable using PE-SR405FLJ coax is part of our full line of RF components available for same-day shipping. Pasternack's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. This Pasternack MMBX to SMA cable assembly has a plug to male gender configuration with 50 ohm formable PE-SR405FLJ coax. The PE3W05863/HS-48 MMBX plug to SMA male cable assembly operates to 12.4 GHz.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Snap-On MMBX Plug to SMA Male Cable 48 Inch Length Using PE-SR405FLJ Coax with HeatShrink PE3W05863/HS-48

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 Phone: (866) 727-8376 or (949) 261-1920 • Fax: (949) 261-7451

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#### **Electrical Specifications**

| Description                   | Minimum | Typical       | Maximum | Units              |
|-------------------------------|---------|---------------|---------|--------------------|
| Frequency Range               | DC      |               | 12.4    | GHz                |
| VSWR                          |         |               | 1.5:1   |                    |
| Velocity of Propagation       |         | 69.5          |         | %                  |
| RF Shielding                  | 100     |               |         | dB                 |
| Group Delay                   |         | 1.43 [4.69]   |         | ns/ft [ns/m]       |
| Capacitance                   |         | 29 [95.14]    |         | pF/ft [pF/m]       |
| DC Resistance Inner Conductor |         | 65.7 [215.55] |         | Ohms/1000ft [Ohms  |
| Km]                           |         |               |         |                    |
| DC Resistance Outer Conductor |         | 10.2 [33.46]  |         | Ohms/1000ft [Ohms/ |
| Km]                           |         |               |         |                    |

#### Specifications by Frequency

| Description           | F1  | F2    | F3    | F4    | F5    | Units |
|-----------------------|-----|-------|-------|-------|-------|-------|
| Frequency             | 1   | 2     | 4     | 8     | 12.4  | GHz   |
| Insertion Loss (Max.) | 1.1 | 1.424 | 2.072 | 3.023 | 3.819 | dB    |
|                       |     |       |       |       |       |       |

#### **Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax use in this assembly. The Insertion Loss includes an estimated insertion loss of 0.2dB of connector Loss

## **Mechanical Specifications**

Cable Assembly Length\* Diameter

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Outer Conductor Material and Plating Jacket Material Jacket Diameter 48 in [121.92 cm] 0.315 in [8 mm]

PE-SR405FLJ 50 Ohms Solid Copper Clad Steel, Silver PTFE 1 Tinned Copper Composite Braid FEP, Black 0.105 in [2.67 mm]

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One Time Minimum Bend Radius **Repeated Minimum Bend Radius** 

0.5 in [12.7 mm] 0.787 in [19.99 mm]

## Connectors

| Description                          | Connector 1            | Connector 2        |  |
|--------------------------------------|------------------------|--------------------|--|
| Туре                                 | MMBX Plug              | SMA Male           |  |
| Specification                        |                        | MIL-STD-348A       |  |
| Impedance                            | 50 Ohms                | 50 Ohms            |  |
| Connection Method                    | Snap-On                |                    |  |
| Mating Cycles                        | 100                    |                    |  |
| Contact Material and Plating         | Beryllium Copper, Gold | Brass, Gold        |  |
| Contact Plating Specification        |                        | 50µ in. minimum    |  |
| Dielectric Type                      | PTFE                   | Teflon             |  |
| Outer Conductor Material and Plating | Brass, Gold            |                    |  |
| Body Material and Plating            | Brass, Gold            | Brass, Gold        |  |
| Body Plating Specification           |                        | 3µ in. minimum     |  |
| Coupling Nut Material and Plating    |                        | Brass, Gold        |  |
| Coupling Nut Plating Specification   |                        | 3µ in. minimum     |  |
| Hex Size                             |                        | 5/16 Inch          |  |
| Torque                               |                        | 3 in-lbs [0.34 Nm] |  |

Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

#### **Environmental Specifications**

Temperature **Operating Range** 

-55 to +125 deg C

Compliance Certifications (see product page for current document)

## Plotted and Other Data

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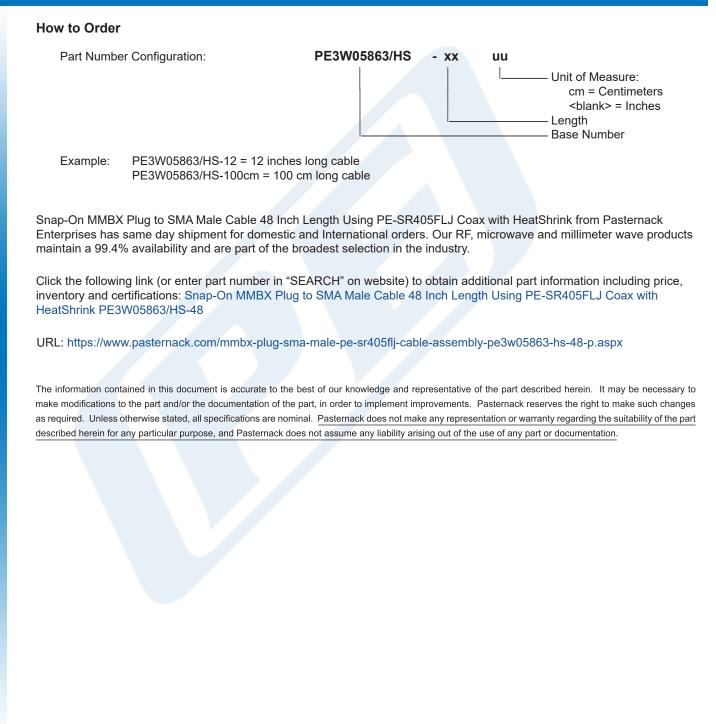






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# PE3W05863/HS-48 CAD Drawing Snap-On MMBX Plug to SMA Male Cable 48 Inch Length

Using PE-SR405FLJ Coax with HeatShrink

